

DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge Program

333 Burma Rd.

Oakland, CA 94607

(510) 622-5660, (510) 286-0550 fax

*Flex your power
Be energy efficient!*

April 24, 2008

Contract No. 04-0120F4

04-SF-80-13.2 / 13.9

Self-Anchored Suspension Bridge

Letter No. 05.03.01-001803

Michael Flowers
Project Executive
American Bridge/Fluor, A JV
375 Burma Road
Oakland, CA 94607

Dear Michael Flowers,

Submittal 576, Rev. 1 - Tower Anchorage Erection Procedure

The Department has completed review of Submittal ABF-SUB-000576R01, "Tower Anchorage Erection Procedure," dated April 10, 2008. The submittal is "Approved as Noted," as shown on the attached drawings and as outlined by the following comments:

CATEGORY B:

1. Relying on the fit-up of the cross brace at elevation 47m, as well as the survey data, may not be sufficient to control the tower alignment. The alignment of the shafts needs to be physically verified by some positive means at the strut elevations near the top and bottom of the lift. ABF has mentioned in Comment 6 of their response that controlling the tower alignment falls under means and methods. However, the Contractor's means and methods need to be coordinated and consistent. In the fabrication procedure for the struts and shafts, ZPMC has stated that the struts and shafts will be shop drilled and fit. This makes it even more critical to physically verify strut locations to ensure that they will connect properly before grouting. Per WDC discussion it is understood that this alignment will be addressed as required in Special Provisions Section 10-1.59, "Steel Structures," subsection "Erection Plan," sections D through F, in the Tower Erection Plan to be submitted at a future date. It should also be noted that all of these elements must still meet the dimensional tolerances required for fabrication, assembly, and erection of the tower.
2. Address the following additional items in the Tower Erection Plan to be submitted at a future date:
 - Provide additional detail on how lateral restraints will be used to prevent damage to the anchor bolts during the anchorage lowering operation.
 - Provide calculations showing the stresses imposed on the permanent structure due to the jacking lug attachments shown in Section A-A of Sheet DE110KS.
 - Provide additional detail on any anchors into the concrete of the T1 footing so that it will not interfere with the top slab reinforcement.
 - Provide additional detail to describe the restraints to be used against lateral movement.

3. The precision of the survey to be used in the erection is undefined in this procedure and must be detailed in the supplement to the Survey Plan working drawing described in Special Provision Section 10-1.23, "Construction Surveying," to be submitted at a future date.
4. Address the items previously listed as Category B comments in the response to Revision 0.

The attached drawings include those returned in Submittal ABF-SUB-000576R00, as well as the two sheets modified in this revision.

Sincerely,



GARY PURSELL
Resident Engineer

Attachment

cc: Rick Morrow, Gary Lai, Mark Woods
file: 05.03.01, 55.0576